UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,952	12/05/2001	Yves Schabes	401122.0004	8503

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ART UNIT	PAPER NUMBER
2162	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/004,952	SCHABES ET AL.
	Examiner	Art Unit
	BAOQUOC TO	2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *08/23/2010*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *75-85,87-91 and 97-99* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *75-85,87-91 and 97-99* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   In response to the Office Action dated on 05/12/2010, applicants amend the

application as follow:

      Claims amended: 75 and 98

      Claims canceled: 1-74, 86 and 92-96

      Claims pending: 75-85, 87-91 and 97-99

Response to Arguments

2.   Applicant's argument filed on 08/23/2010 has been fully reviewed and new

ground of rejection in view of the applicant's argument is provided below.

      Applicant argues "a first fundamental difference between Trower and present

application is that Trower analyzes partially complete (or partially incomplete input

requests. The input requests are not queries designed to provide information..."

      Examiner respectfully disagrees with the above argument. Requests in Trower is

a query wherein information is retrieved based on input requests. Applicant has

provided numerous examples in the application specification for supporting the claims;

however, the claims as broadest reasonable interpretation are met by Trower.

Applicant is advised to amend more to clarify the claimed language.

      Applicant also argues "a second fundamental difference between Trower and the

present invention is that Trower's "variables" automatically correspond user input with a

category or function while the matching restriction of a partially unspecified term must

be verified according to the claims of the present invention..."

Examiner respectfully disagrees with the above argument. In Trower, col.9, table

1 and 2, the user are allowed to use operators for specifying the unspecified term.

These operators allow matching of the matching of the unspecified term.

Applicant also argues "moreover, the combination of Trower and Saka would not

yield the process that is claimed in the present invention..."

Examiner respectfully disagrees with the applicant argument. Requests and

queries are the same in the concepts for retrieving information. The requests in Trower

are being searched for the result after the completed a partial requested. Trower might

use an extra step to search for information; however, the claimed language does not

negate the extra process from the Trower concept.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

3.   Claims 75 to 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Trower, II et al. (Patent No. 6,922,810 B1) in view of (Pub. No. US 2002/0002547 A1).

        As to 75, (Currently amended) Trower discloses a method of fulfilling an

information need comprising:

        receiving a query pertaining to the information need, the query comprised of a

fully specified term and a partially unspecified term wherein the partially unspecified

term is representative of a matching restriction designed to meaningfully restrict the

query results (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26);

        processing the query against a plurality of information containing documents to

determine a query match based on the presence of the fully specified term and the

presence of a match to the matching restriction of the partially unspecified term within a

document, wherein the order of the fully specified term with respect to the match to the

matching restriction of the partially unspecified term need not be in the same order as

the query (the rules grammar 220 can include variable in addition to wildcards.

Variables are similar to wildcards in that they can be matched by any user input...) (col.

10, lines 1-7); and

returning a result that includes the matching portion of the document in which a

query match was determined (the rules grammar 220 can include variable in addition to

wildcards. Variables are similar to wildcards in that they can be matched by any user

input...) (col. 10, lines 1-7),

wherein the partially unspecified term includes at least one of a i) syntactical

criteria (grammar rules) (col. 10, lines 1-7) including one of a noun phrase, verb phrase,

prepositional phrase, adverbial phrase, and adjectival phrase (grammar rules) (col. 10,

lines 1-7), or ii) a morphological criteria (grammar rules) (col. 10, lines 1-7) comprises

one of a noun, verbal noun, adjective, conjunction, pronoun, adverb, verb, transitive

verb, intransitive verb, verb in past tense, verb in present tense, verb in future intense,

present participle of a verb, past participle of a verb, and gerund (grammar rules) (col.

10, lines 1-7); or iii) categorical (grammar rules) (col. 10, lines 1-7).

Trower does not explicitly disclose the method as recited is a query for retrieval

data; However, SAKO discloses query retrieval using morphological analysis (according

to the above process, for example, if the morphological analysis result sown in FIG. 17

is input, the word "Jurassic World" is extracted as keywords, and the retrieval condition

for retrieving the retrieval character sequence "director" and "director of Jurassic World"

is prepared, as shown in FIG. 20) (paragraph 0142). This suggests of the concept of

search and retrieving of word such as director and Jurassic Work is a noun as a

morphological restriction. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Trower to include concept of search and retrieving of word such as director and Jurassic Work is a noun as a morphological restriction as disclosed SAKO in order to retrieve data as accustomed to user need.

As to claim 76, (previously presented) Trower discloses the method of claim 75, further comprising:

identifying documents that contain the partially unspecified term in an index;

identifying contexts within the index in accordance with the query wherein the index includes pre-analyzed contexts of terms appearing within the plurality of information containing documents (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26);

converting the query into a finite state automaton (FSA) (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26); and

matching the finite state automaton (FSA) against the identified contexts(for example what is %symbol%+ trading at ...) (col. 10, lines 20-26).

As to claim 77, (previously presented) Trower discloses the method of claim 76, wherein the finite state automaton (FSA) is a finite state transducer (FST) (computer) (col. 2, lines 49-52).

As to claim 78, (previously presented) Trower discloses the method of claim 76, wherein the finite state automaton (FSA) allows for the appearance of fully specified and at least partially unspecified terms in any order in a potential matching context (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26).

As to claim 79, (previously presented) Trower discloses the method of claim 76, wherein the finite state automaton (FSA) allows for one or more intervening words between the fully specified and at least partially unspecified terms in a potential matching context (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26).

As to claim 80, (previously presented) Trower discloses the method of claim 76, wherein the contexts are stored as finite state automatons (FSAs) (computer) (col. 2, lines 49-52).

As to clam 81, (previously presented) Trower discloses the method of claim 76, wherein the documents are accessible over the Internet (internet) (col. 4, lines 35-41).

As to claim 82, (previously presented) Trower discloses he method of claim 76, wherein the documents comprise World Wide Web Pages (internet) (col. 4, lines 35-41).

As to claim 83, (previously presented)Trower discloses the method of claim 75

further comprising assigning a score to the query match (score module) (col. 10, lines

55-67).

As to claim 84, (previously presented) Trower discloses the method of claim 83

wherein the score reflects the number of times an instance of the query match is located

among the plurality of documents (for example what is %symbol%+ trading at ...) (col.

10, lines 20-26).

As to claim 85, (previously presented) Trower discloses the method of claim 84

further comprising ranking the documents that contain a query match based on a

number of times the query match is located within a document (score module) (col. 10,

lines 55-67).

As to claim 86, (previously presented) Trower discloses the method of claim 75

wherein the partially unspecified term includes a syntactic or a morphological restriction

(grammar rules) (col. 16-40).

As to claim 87, (previously presented) Trower discloses the method of claim 76

wherein the index comprises locations of terms within documents (for example what is

%symbol%+ trading at ...) (col. 10, lines 20-26).

As to claim 88, (previously presented) Trower discloses the method of claim 87

further comprising: determining the location of a term in the query within a document

using the index; and locating a query match for the query based on the location of the

term within the document (for example what is %symbol%+ trading at …) (col. 10, lines

20-26).

As to claim 89, (previously presented) Trower discloses the method of claim 88

further comprising ranking a plurality of the located matches or portions thereof (scoring

module) (col. 10, lines 55-67).

As to claim 90, (previously presented) Trower discloses the method of claim 89

wherein the ranking is based on one or more features selected from the list consisting

of: the location of a match within a document, a weight assigned to a document that

contains a match, the age of a document that contains a match, the source of a

document that contains a match, and a format feature of a match within a document

(scoring module) (col. 5, lines 67).

As to claim 91, (New) Trower discloses the method of claim 75 wherein the query

includes a delimiter indicating a first portion of the query for which a relative order is

preserved for one or more terms included in the first portion, the relative order being in

accordance with a physical position of each term in the first portion with respect to any

other terms in the first portion (for example what is %symbol%+ trading at …) (col. 10,

lines 20-26).

As to claim 97, (previously presented) Trower the method of claim 75 wherein the

matching restriction includes a criteria defined in accordance with a determination by a

computer program (instructions program stored in (Memory, ROM and RAM) (col. 3,

lines 48-50 and col. 3, lines 65-67).

As to claim 98, (Currently ameded) Trower discloses a computer readable

medium (Memory, ROM and RAM) (col. 3, lines 48-50 and col. 3, lines 65-67) storing a

computer program product for fulfilling an information need, the computer readable

medium comprising:

computer program code for receiving a query pertaining to the information need,

the query comprised of a fully specified term and a partially unspecified term wherein

the partially unspecified term is representative of a matching restriction designed to

meaningfully restrict the query results (col. 10, lines 1-7) (for example what is

%symbol%+ trading at …) (col. 10, lines 20-26);

computer program code for processing the query against a plurality of

information containing documents to determine a query match based on the presence of

the fully specified term and the presence of a match to the matching restriction of the

partially unspecified term within a document, wherein the order of the fully specified

term with respect to the match to the matching restriction of the partially unspecified

term need not be in the same order as the query (the rules grammar 220 can include

variable in addition to wildcards. Variables are similar to wildcards in that they can be

matched by any user input...); and

computer program code for returning a result that includes the matching portion

of the document in which a query match was determined (the rules grammar 220 can

include variable in addition to wildcards. Variable are similar to wildcards in that they

can be matched by any use input...) (col. 10, lines 1-7),

wherein the partially unspecified term includes at least one of a i) syntactical

criteria (grammar rules) (col. 10, lines 1-7) including one of a noun phrase, verb phrase,

prepositional phrase, adverbial phrase, and adjectival phrase (grammar rules) (col. 10,

lines 1-7), or ii) a morphological criteria (grammar rules) (col. 10, lines 1-7) comprises

one of a noun, verbal noun, adjective, conjunction, pronoun, adverb, verb, transitive

verb, intransitive verb, verb in past tense, verb in present tense, verb in future intense,

present participle of a verb, past participle of a verb, and gerund (grammar rules) (col.

10, lines 1-7); or iii) categorical (grammar rules) (col. 10, lines 1-7).

Trower does not explicitly disclose the method as recited is a query for retrieval

data; However, SAKO discloses query retrieval using morphological analysis (according

to the above process, for example, if the morphological analysis result sown in FIG. 17

is input, the word "Jurassic World" is extracted as keywords, and the retrieval condition

for retrieving the retrieval character sequence "director" and "director of Jurassic World"

is prepared, as shown in FIG. 20) (paragraph 0142). This suggests of the concept of

search and retrieving of word such as director and Jurassic Work is a noun as a

morphological restriction. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Trower to include concept of search and retrieving of word such as director and Jurassic Work is a noun as a morphological restriction as disclosed SAKO in order to retrieve data as accustomed to user need.

As to claim 99, (Previously amended) Trower discloses the computer readable medium of claim 98, further comprising:

computer program code for identifying documents that contain the partially unspecified term in an index, the index including pre-analyzed contexts of terms appearing within the plurality of documents (col. 10, lines 1-7) (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26); and

computer program code for identifying contexts within the index in accordance with the query, the index including preanalyzed contexts of terms appearing within a plurality of documents(col. 10, lines 1-7) (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26);

computer program code for converting the query into a finite state automaton (FSA) (col. 10, lines 1-7) (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26); and

computer program code for matching the finite state automaton (FSA) against the identified contexts(col. 10, lines 1-7) (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26).

Conclusion

4.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to BAOQUOC TO whose telephone number is (571)272-

4041. The examiner can normally be reached on 8:30 - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Breene can be reached on 571-272-4107. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BAOQUOC TO/
Primary Examiner, Art Unit 2162